

Spatial New Data

EyeCom II...

COMPLETELY NEW PACKAGE OFFERS SIGNIFICANT PERFORMANCE INCREASE

The EyeCom II Picture Digitizer and Display affords full picture processing capability using Spatial Data's Image Processing Software and the high-performance EyeCom scanner, *plus* a state-of-the-art picture and graphics and alphanumeric terminal. All elements required for picture processing are combined in this latest and economically priced version of the EyeCom...proven in the market place for over two years. Check all the features on reverse side.

Background:

The EyeCom I (Model 108PTS) was originally designed as a complete input-output computer peripheral for digitizing and displaying gray-scale and color images. EyeCom systems are currently used worldwide in the following ongoing activities:

- MULTI-SPECTRAL PROCESSING—classifying features of LANDSAT earth photography;
- INDUSTRIAL RADIOGRAPHIC INSPECTION—enhancing and measuring objects and flaws captured on x-ray film;
- BIOLOGICAL RESEARCH—separating and counting muscle fibers and diagnosis of muscular dystrophy;
- INTERFEROMETRY—analyzing fringe patterns for testing of precision optics;
- QUALITY CONTROL—non-contact measurement of small, precision manufactured parts;
- DIGITAL IMAGE PROCESSING—university graduate school programs teaching advanced techniques;
- GRAPHICS DESIGN—color design production for the textile industry.



EyeCom Model 108PTS
with scanner



EyeCom Model 108PTS
with scanner & microscope



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EyeCom Picture Digitizer and Display System, interfaced to a pin-registered film projector for semi-automated data reduction of motion picture film.

EyeCom II FEATURES:

SCANNER: A specially selected TV camera tube, combined with stable electronic circuitry to accurately scan almost any object—photograph, radiograph, microscope image, artwork, etc., can provide:

- Over 200:1 gray-scale range
- Less than ½% geometric distortion
- Internal shading correction
- Dynamic focusing, beam regulator
- Single compact package

VIDEO PROCESSOR: Prior to digitization, video is pre-processed either linearly or logarithmically, and gray-scale can be expanded up to 5X under software control. Provides full 8-bit digitization of low contrast pictures.

DIGITIZERS: Two types available—both 8-bits gray-scale resolution.

RANDOM ACCESS: Basic digitizer samples any point on TV raster providing random access to any point, or array of points, on a 640x480 grid. Automatically increments through any rectangular array for direct digitization to EyeCom Picture Display or microcomputer. Digitizes full picture in 2.4 seconds.

REAL TIME: Digitizes 640x480 grid in 1/30 second to Display. Requires 8-bit picture display.

PICTURE DISPLAY: Color, pseudocolor, and black and white with full resolution 640x480 up to 18-bits. The 64 color look-up table produces 8-bits of red, green, and blue. Special converters eliminate noise and "glitches" to reproduce a faithful gray-scale. A graphics overlay is standard with each unit.

ZOOM AND PAN: The Picture Display can be magnified 2X, 3X, 4X, 5X, 6X, 7X, or 8X without disturbing picture data in the refresh memory. It can be scrolled both vertically and horizontally by increments of one pixel so that any portion may be viewed when zoomed.

REFRESH MEMORY BIT MASKS: Special bit mask register selects refresh memory bits to be read or written. Makes writing to graphics bit simple.

STANDARD VIDEO OUTPUTS: Output video from EyeCom contains composite sync waveform and conforms to television standards for tape recording.

ALPHANUMERIC DISPLAY: Full upper and lower case 96 character set and 32 Greek and special characters. Backspace, tab, vertical tab and line feed are implemented. Twenty-four lines of 80 characters each are displayed in an easy-to-read font generated on a 7x9 dot matrix, with distenders for lower case.

MICROPROCESSOR: Optional LSI-11 microprocessor is built into the EyeCom to provide stand-alone image processing capability.

These features plus Spatial Data's Image Processing Software make EyeCom II the choice, whether you are just starting in image processing or require an additional useful and affordable tool for a large image processing laboratory.